# Exhibit 1: Curriculum Vitae Robert A Taft Jr.

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### Education

<u>Doctor of Philosophy</u> , Reproductive Physiology, West Virginia University	1999
Master of Science, Animal Science, Pennsylvania State University	1996
Bachelor of Science, Dairy Science, Ohio State University	1990

# Professional Experience

<u>Director</u> , Reproductive Sciences, The Jackson Laboratory, 20	008-Present
Associate Director, Reproductive Sciences, The Jackson Laboratory,	2004
Senior Manager, RTR, The Jackson Laboratory,	2004
Senior Reproductive Biologist, The Jackson Laboratory,	2001-2004
NIH Postdoctoral Fellow, The Jackson Laboratory,	1999-2001
Graduate Research Assistant, West Virginia University,	1994-1999
Graduate Research Assistant, Pennsylvania State University,	1991-1993

### Research Interests

Development, refinement and implementation of techniques for managing reproduction in mice.

#### Grants

2 P40 RR01262-21 Cryopreservation of Murine Germplasm	2004-2007
INRSA Interaction between oocytes and the oviduct of the mouse	2000-2002

### Selected Publications

- Byers SL, Wiles MV, Taft RA. 2009. Surgical oocyte retrieval (SOR): a method for collecting mature mouse oocytes without euthanasia. J Am Assoc Lab Anim Sci 48(1):44-51.
- Ostermeier GC, Wiles MV, Farley JS, Taft RA. 2008. Conserving, distributing and managing genetically modified mouse lines by sperm cryopreservation. PLoS One 3(7):e2792.
- Taft RA. 2008. Virtues and limitations of the preimplantation mouse embryo as a model system.. Theriogenology 69(1):10-6.
- Byers SL, Payson SJ, Taft RA. 2006. Performance of ten inbred mouse strains following assisted reproductive technologies (ARTs). Theriogenology 65(9):1716-1726. 16271754
- Davisson MT, Taft RA. 2006. Strategies for managing an ever increasing mutant mouse repository. Brain Res 1091:255-257.
- Taft RA, Davisson M and Wiles MV. 2006. Know thy mouse. Trends Genet 22:649-653.

- **Taft, R.**, J.M. Denegre, F.L. Pendola and J.J. Eppig. 2002. Identification of Mouse Oocyte Secretory and Transmembrane Proteins by a Signal Sequence Trap. Biol. Reprod. 67:953-960.
- Bridges, P.J., **R. Taft**, P.E. Lewis, W.R. Wagner, and E.K. Inskeep. 2000. Effect of the previously gravid uterine horn and postpartum interval on follicular diameter and conception rate in beef cows treated with estradiol benzoate and progesterone. J. Anim. Sci. 78:2172-2176.
- Sayre B.L., R. **Taft**, E.K. Inskeep and J. Killefer. 1999. Changes in gene expression during regression of the early bovine corpus luteum: Increased Expression of IGF binding protein –1. Biol. Reprod.
- Inskeep, E.K., P.E. Lewis, R.A. Dailey, P.J. Bridges, R.A. **Taft** and B.L. Sayre. 1997. Follicular and luteal factors that affect embryonic survival in the cow. Proc. 16<sup>th</sup> Ann. Conv. Amer. Embryo Transfer Assn. p. 36-41.

# **Book Chapters**

- Pritchett K, Taft RA. 2006. Reproduction in The Mouse in Biomedical Research, (Barthold S, Davisson MT, Newcomer C, Quimby F, Smith A eds). Elsevier Press, San Diego.
- Wiles MV, Taft RA, 2010. The sophisticated mouse: protecting a precious reagent. In Methods Mol Biol. 602:23-36. (Proetzel G and Wiles MV eds). Springer, NY

#### **Patents**

- Wiles MV, Taft RA, Eicher EM. 2009. Methods for maintaining genetic stability of inbred animal strains. US Patent 7,592,501. Filed August 2003 granted September 2009.
- Byers S, Farley JS, Wiles MV, Taft RA. 2007. Method, article, and apparatus for cryopreservation of biological samples. Filing type: U.S. Provisional Patent App. No.60/926,521 filed on April 27, 2007.
- Farley JS, Ostermeier GC, Taft RA, Wiles MV. 2006. Sperm Cryoprotective Media Patent application Number: WO07146344 and US2008026361A Filing type: US and PCT.
- Taft RA, Wiles MV. 2004. Methods and System for managing mouse colonies. Filing type U.S. Provisional Patent App. 2005/0108048 Al

# Research Support.

#### **ONGOING**

1 R21 RR025909-01 Wiles (PI)

7/1/09-6/30/11

NIH/NCRR

Development of an Economic Process to Store and Recover Homozygous Mouse Strains

The goals of this project are to develop a method to artificially inseminate ovarian transplant recipients and to recover oocytes from cryopreserved ovaries.

Role: Co-Investigator

5 P30 CA034196-26 Woychik (PI)

7/1/07-6/30/12

NIH/NCI

Cancer Center Support (Core) Grant - Rederivation/Cryo/Reconstitution (Project 12) This project supports rederivation, cryopreservation and reconstitution services for TJL staff.

Role: Project Leader

5 P40 RR001262-28 Taft (PI)

8/21/07-6/30/12

NIH/NCRR

Cryopreservation of Murine Germplasm

This grant supports the maintenance of a repository of cryopreserved embryos and gametes from strains maintained at The Jackson Laboratory.

Role: PI

5 R01 EY016501-05 Nishina (PI)

5/1/05-4/30/10

NIH/NEI

Models for Vision Research

The major goal of this project is to characterize, map and positionally clone genes that cause ocular disease and to identify entry points into new pathways that are important in eye biology and will afford the opportunity to build and test hypotheses about normal ocular function and disease pathology.

Role: Sr.Mgr.Rep Tech

### COMPLETED

OP-IA-0044-03 Woychik (PI)

12/31/03-12/31/06

Ellison Medical Foundation

Mouse Models of Human Diseases: Application of Assisted Reproductive Techniques

The major goals of this project are to preserve and distribute mice in the cryopreserved state quickly and cost-effectively, and to educate the scientific community in their use.

Role: Co-Investigator

3 P30 CA034196-23S2 Woychik (PI)

9/25/01-11/30/06

NIH/NCI

Cancer Center Support (Core) Grant - Reproductive Sciences (Project 2) This project supports the cryopreservation of strains developed or required by the Cancer Center investigators, and the generation of new genetically modified mouse strains by pronuclear injection and gene targeting.

Role: Project Leader

5 P40 RR001262-25 Taft (PI)

7/1/02-6/30/07

NIH/NCRR

Cryopreservation of Murine Germplasm

This grant supports the maintenance of a repository of cryopreserved embryos and gametes from strains maintained at The Jackson Laboratory.

Role: PI

### **Invited talks**

A Model for the Conservation of Genetic Resources. Poultry Science Association Annual Meeting 2005. Auburn AL.

Virtues and Limitations of the mouse as a model. International Embryo Transfer Society Annual Meeting 2008 Denver, CO

Tools for managing mouse strains for efficiently. Transgenic Technologies Annual meeting 2010. Berlin Germany

A reliable and cost-effective method for sperm cryopreservation. 4<sup>th</sup> Workshop on Innovative Mouse Models. Leiden The Netherlands June 2007

### **Study Section**

ZRG1 ETTN-A(14) Spring 2010 SBIR/STTR Biology of Development and Aging Small Business Applications

ZRG1-ETTN A (14) Fall 2009 SBIR/STTR Meeting Biology of Development and Aging Small

**Business Applications** 

ZRG1 BDA-L(95)B Special Emphasis Panel/Scientific Review Group July 2009